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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,543	03/15/2004	Yinghua Yao	MI103.70228US00	1321
45840 7590 01/05/2009 WOLF GREENFIELD (Microsoft Corporation) C/O WOLF, GREENFIELD & SACKS, P.C. 600 ATLANTIC AVENUE BOSTON, MA 02210-2206				
EXAMINER JEAN GILLES, JUDE				
ART UNIT 2443		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/800,543

Applicant(s)

YAO ET AL.

Examiner

JUDE J. JEAN GILLES

Art Unit

2443

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03/15/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-850)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 03/15/2004 and 05/31/2005

DETAILED ACTION

This Office Action is in Reply to communication filed on 03/15/2004.

Information Disclosure Statement

1. The information disclosure statements (IDS) submitted on 03/15/2004 and 05/31/2005 were filed respectively on and after the mailing date of this application. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements have been considered by the examiner.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 29, and 41 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 1, 29, and 41 used the term "abstract location". This term is spelled out in the specification without specific description of its true meaning as pertained to the claimed invention. Paragraph 0006 contains the phrase "an abstract location type" without further details.

4. Appropriate correction is required. Applicants are required to check the entire application for errors and correct the same.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-12, 22, 29, 30, and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Arora et al (hereinafter Arora) U.S. Pub. N. 2004/0064568

Regarding claims 1-12, 22, 29, 30, and 41, Arora teaches:

1. A method of operating a computer-implemented service (1B, 6-7, 19) comprising:
providing an abstract location object arranged in a schema to enable servicing a received request for a logical location of an electronic endpoint (0011, 0078, 0265, 0145, 0194, and 0648); and
arranging one or more location elements within the context of the abstract location object, the location elements configured to act as peers relative to the logical location, each location element configured to act as a proxy relative to any other location element within the abstract location object (0211, 0428, 0725, 0265, abstract).

2. The method of claim 1 wherein the location elements include one or more of a position, an address, a spatial entity, and an electronic endpoint (0222).
3. The method of claim 1 wherein each location element is capable of running autonomously without requiring an application using the abstract location object to be operable with each location element within the abstract location object (0011).
4. The method of claim 3 wherein a resolver within the location service is configured to respond to requests from an application by populating the response with location elements according to information received by one or more location elements acting as proxies (0255, 0213, and 0458).
5. The method of claim 1 wherein the schema logically wraps disparate location elements to represent a given location (0350).
6. The method of claim 1 wherein the schema enables a location object to be populated by different processes which understand different elements of a single structure(0350).
7. The method of claim 1 wherein the electronic endpoint can include one or more of a wireless access point, an IP address, an email address, an Instant Message address, a phone number, a fax number as a logical location and location proxy (0155, 0265, and 0689).

8. The method of claim 1 wherein the schema is configured to hold multiple types of elements which represent a same logical location and can function as location proxies for each other (0361).

9. The method of claim 8 wherein the elements are defined with attributes that include nested data types to provide a certainty of a location (figs 6-11).

10. The method of claim 1 wherein the schema is configured via a hierarchical location aware data structure by providing one or more extensible abstract base classes independent of location data (figs 6-11).

11. The method of claim 1 wherein the schema supports a location service, the schema being extensible and agnostic to a provider of location information and a technology used by the provider (0145, and 0265).

12. The method of claim 11 wherein the location service is one or more of a locally executed module and a distributed function of a computer network (figs 6-11).

22. The method of claim 1 wherein the schema includes a plurality of nested data

structures holding one or more arrays and matrices of data in a hierarchical format to provide location data.

29. A computer readable medium on which is stored a schema organized to store and provide location data, the schema comprising: one or more extensible abstract base classes configured to hold location elements configured to act as peers relative to a logical location, each location element configured to act as a proxy relative to other location elements in the schema, each abstract base class responsive to a plurality of applications to provide and store location data in the schema, including unrecognized types of location information; and a hierarchical data structure including the abstract base classes, the hierarchical data structure configured to enable formation of a location object (0011, 0078, 0265, 0211, 0428, 0725, 0265, abstract).

30. The computer readable medium of claim 29 wherein the hierarchical data structure and the abstract base classes enable storing the schema in memory-limited devices (0460, 0744).

41. A computer system comprising: a processor; and a memory coupled to the processor, the memory storing a plurality of hierarchically arranged data structures in a schema the hierarchical data structures configured to provide one or more extensible abstract base classes configured to retrieve and provide location data of a logical

location, the abstract base classes responsive to a plurality of applications to provide and store location data in the schema, including unrecognized types of location data, the schema configured to enable servicing a received request for a logical location of an electronic endpoint, the schema configured as an abstract location object with the location elements configured to act as peers relative to the logical location, each location element configured to act as a proxy relative to other location elements within the abstract location object (0011, 0078, 0265, 0211, 0428, 0725, 0265, abstract).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 13-21, 23-28, 31-40, and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arora, in further view of Goring et al (hereinafter Goring), US Pub. No. 20050198100 A1.

Regarding claim 13, Arora teaches the method of operating a the computer-implemented method of claim 1, but fails to disclose the method of claim 1 wherein the schema includes a Core.LocationElement data structure independent of location data,

the Core.LocationElement data structure inheriting from one or more of a Location.IEEE802 dot11, Location.NamedLocation, Location.Address, Location.Position, Location.EntityReference data structure. Nonetheless, this feature is well-known in the art and would have been an obvious modification to the system of Arora as evidenced by Goring.

In the same field of endeavor, Goring teaches a system capable of using 802.11 IEEE protocol to with a structure definition language to construct schemas, with components reflecting a series predefined elements (see figs. 8-10 a-b, also see par. 0031, and 0053). Using this techniques enables an average skill in the art to create items with the schema that can variably contains elements related to different cores such as position, location, and address.

Accordingly, it would have been obvious for an average skill in the art to have incorporated the teaching of Goring within the system of Arora, to build a system capable of driving down the complexity involved in developing the wireless application thereby reducing the need to the cost of explicit coding and the used of device resources (see Goring par. 0005). By this rationale, claim 13 is rejected.

The combination of Arora and Goring reject claims 14-21, 23-28, 31-40, and 42-45 as there are all slight variation of the type of elements constituting different item elements within the 802.11 IEEE connection and schema. The same motivation and reason for allowance utilized for the rejection of claim 13 is also valid for these claims.

Conclusion

9. ***This action is made Non-Final.*** Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger, can be reached on (571) 272-4170. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3301.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0800.

/Jude J Jean-Gilles/

Examiner, Art Unit 2443

January 01, 2009